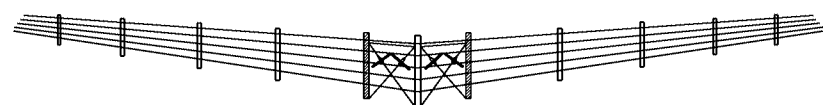
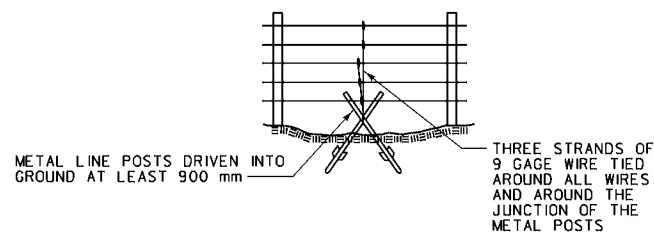


FENCE TYPE	RUN = L (m)	PANELS REQUIRED
COMBINATION WOVEN BARBED	LESS THAN 10	NONE
	10 - 100	SINGLE
	OVER 100 TO 200 MAX.	DOUBLE
BARBED	LESS THAN 20	NONE
	20 - 200	SINGLE
	OVER 200 TO 300 MAX.	DOUBLE



DOUBLE PANEL AT FENCE CORNER OR ANGLE BREAK
FENCE PANEL TYPES

NOTE:
TIE OFF ON ALL CROSS HATCHED OR SHADED POSTS.



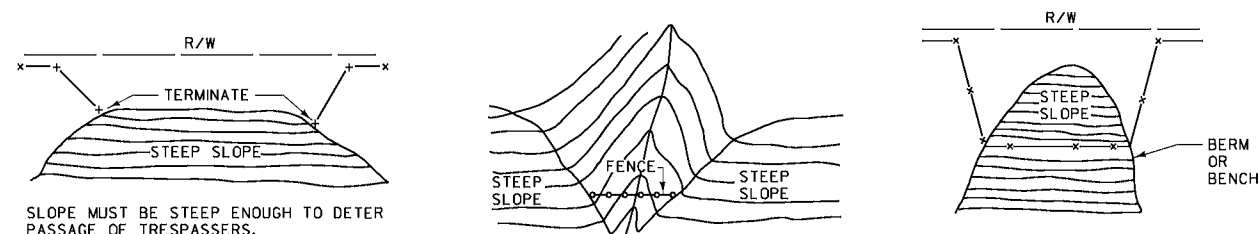
ALTERNATE DEADMAN
WHEN APPROVED BY THE ENGINEER THE ABOVE DEADMAN MAY BE USED IN LIEU OF A ROCK OR PRECAST CONCRETE BLOCK AS SPECIFIED ON DTL. DWG. NO. 607-05.

NOTES:

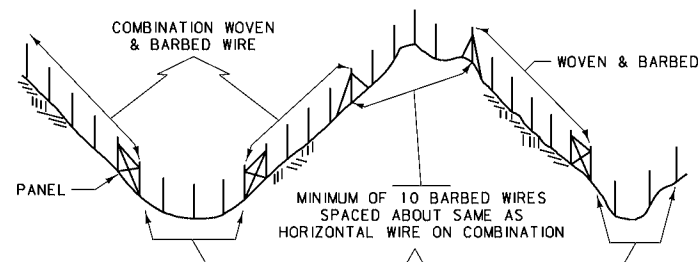
ATTACH BARBED WIRES TO POSTS BY WRAPPING AROUND THE POST AT LEAST TWO TIMES, THEN WRAPPING AROUND ITSELF FIVE TIMES.

TO ATTACH WOVEN WIRE TO AN END POST, REMOVE TWO OR THREE VERTICAL STAY WIRES FROM THE END OF THE FENCE. PLACE THE FIRST COMPLETE VERTICAL STAY WIRE AGAINST THE POST. START AT THE MIDDLE OF THE HORIZONTAL LINE WIRES, WRAPPING AROUND THE END POST AT LEAST TWO TIMES AND THEN WRAPPING AROUND ITSELF FIVE TIMES.

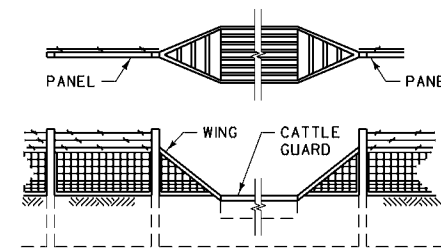
DETAILED DRAWING	
REFERENCE	DWG. NO.
STANDARD SPEC.	607-10
SECTION 607	
FENCING DETAILS	
EFFECTIVE: JANUARY 2004	
	MONTANA DEPARTMENT OF TRANSPORTATION
	MONTANA CADD



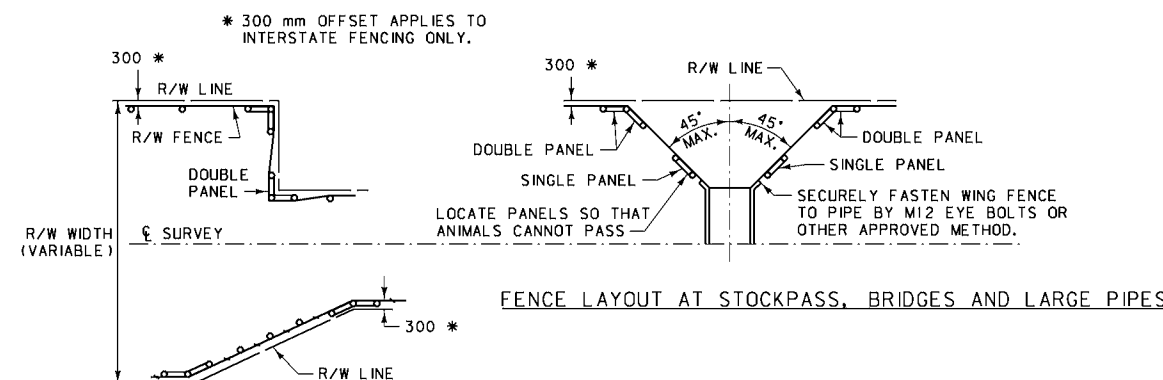
FENCE LAYOUT ON STEEP SLOPES



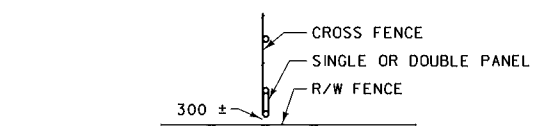
FENCE LAYOUT ON SHARP VERTICAL CURVES
TO AVOID TRYING TO CONFORM WOVEN WIRE TO UNEVEN TERRAIN



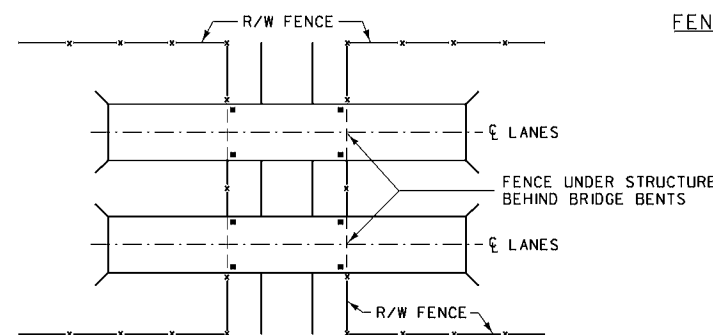
FENCE CONNECTION TO CATTLE GUARD
SECURELY FASTEN FENCE WIRE TO THE WINGS AND ARRANGE SO THAT ANIMALS CANNOT PASS.



FENCE LAYOUT AT CHANGE IN R/W WIDTH



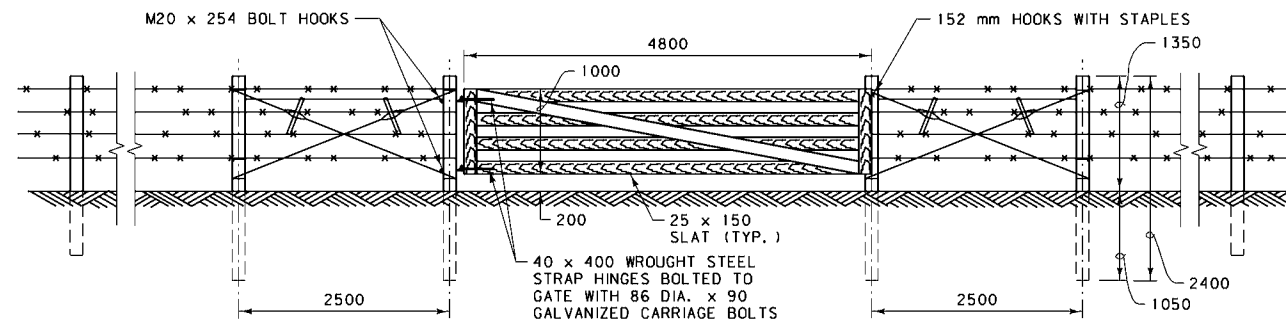
FENCE LAYOUT AT CROSS-FENCE CONNECTION



FENCE LAYOUT AT LOCAL ROAD UNDER INTERSTATE

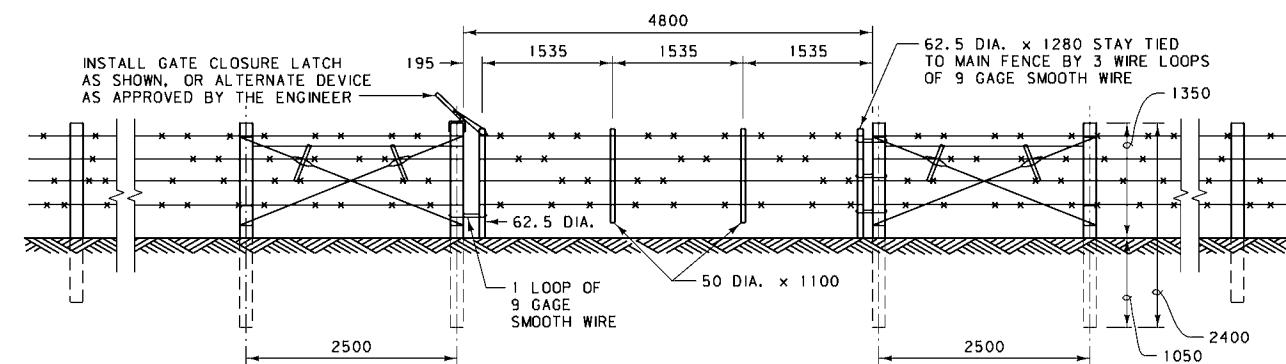
ALL DIMENSIONS ARE MILLIMETERS (mm) UNLESS OTHERWISE NOTED.

DETAILED DRAWING	
REFERENCE	DWG. NO.
STANDARD SPEC.	607-15
SECTION 607	
FENCING DETAILS	
EFFECTIVE: AUGUST 1999	
	MONTANA DEPARTMENT OF TRANSPORTATION
	MONTANA CADD



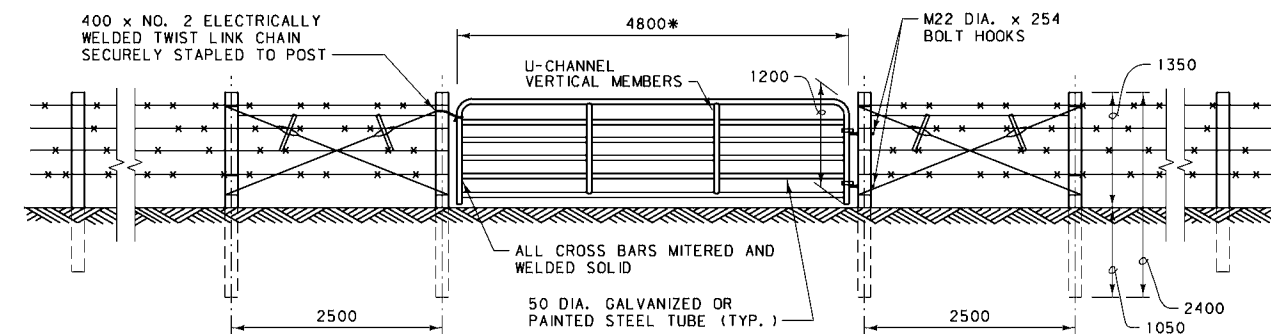
WOOD FARM ENTRANCE GATE (TYPE G-1)

NOTE: USE 10d NAILS AND CLINCH FOR GATE CONSTRUCTION.



WIRE FARM ENTRANCE GATE (TYPE G-2)

NOTE: USE SAME WIRE SCHEME ON GATE AS THAT USED ON FENCE, UNLESS STATED OTHERWISE IN R/W AGREEMENT.



METAL FARM ENTRANCE GATE (TYPE G-3)

NOTES:

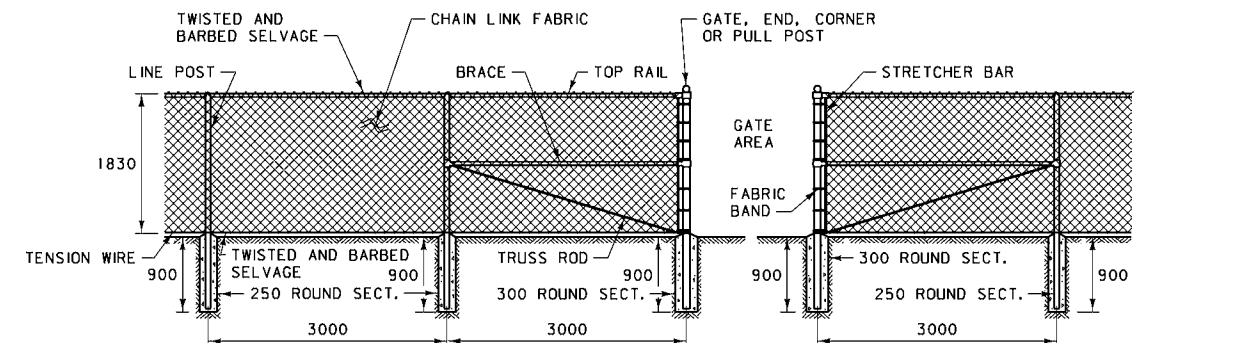
ALL GATES ARE 4800 mm WIDE UNLESS R/W AGREEMENT STATES OTHERWISE.

ALL GATES WILL HAVE A SINGLE OR DOUBLE PANEL AT EACH END.

* TYPE G-3 GATES ARE AVAILABLE IN WIDTHS FROM 1.2 m TO 6.0 m IN 0.6 m INCREMENTS.

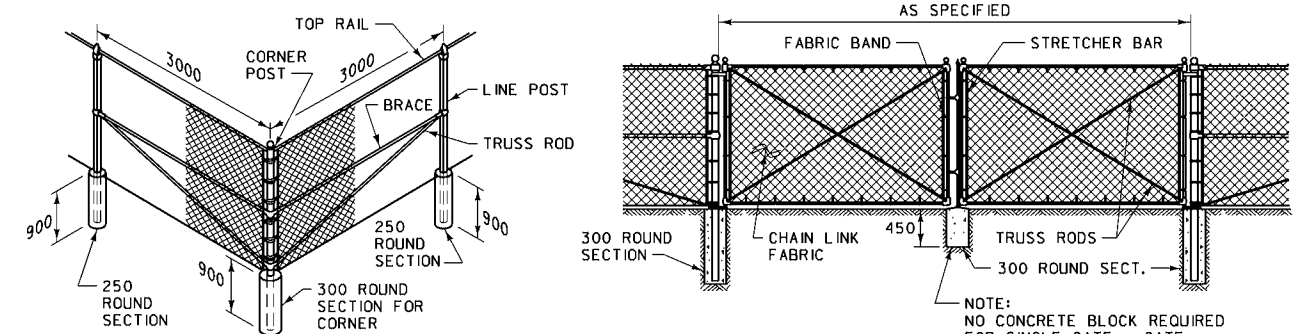
ALL DIMENSIONS ARE MILLIMETERS (mm) UNLESS OTHERWISE NOTED.

DETAILED DRAWING	
REFERENCE	DWG. NO.
SECTION 607	607-20
FARM ENTRANCE GATES	
EFFECTIVE: JANUARY 2004	



1.8 m CHAIN LINK FENCE

SINGLE PANEL

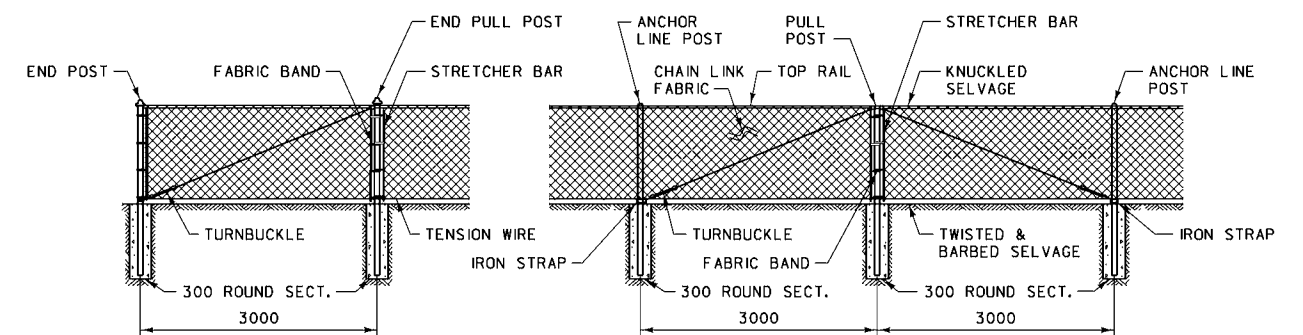


DOUBLE PANEL

PULL POST AND CORNER POST BRACING

GATES

NOTE: NO CONCRETE BLOCK REQUIRED FOR SINGLE GATE. GATE LATCHES DIRECTLY TO POST.



CHAIN LINK FENCE - 0.9 m, 1.2 m AND 1.5 m

NOTES:

SEE THE STANDARD SPECIFICATIONS FOR FURTHER REQUIREMENTS.

DO NOT INSTALL DOUBLE PANELS MORE THAN 90 m APART ON TANGENTS OR MORE THAN 75 m APART ON ANY CURVE. FOR CURVES WITH A RADIUS SHARPER THAN 350 m, INSTALL A DOUBLE PANEL ON EACH CURVE END, PLUS ONE ADDITIONAL PANEL FOR EACH 10° OF DEFLECTION, EVENLY SPACED, BETWEEN THE CURVE ENDS.

PULL POST BRACING ON 1.8 m FENCE IS THE SAME AS CORNER BRACING.

A DROP BAR LOCKING DEVICE IS REQUIRED FOR ALL DOUBLE GATE INSTALLATIONS. THE DROP BAR MUST BE ABLE TO BE INSERTED INTO THE CONCRETE BLOCK AT LEAST 150 mm.

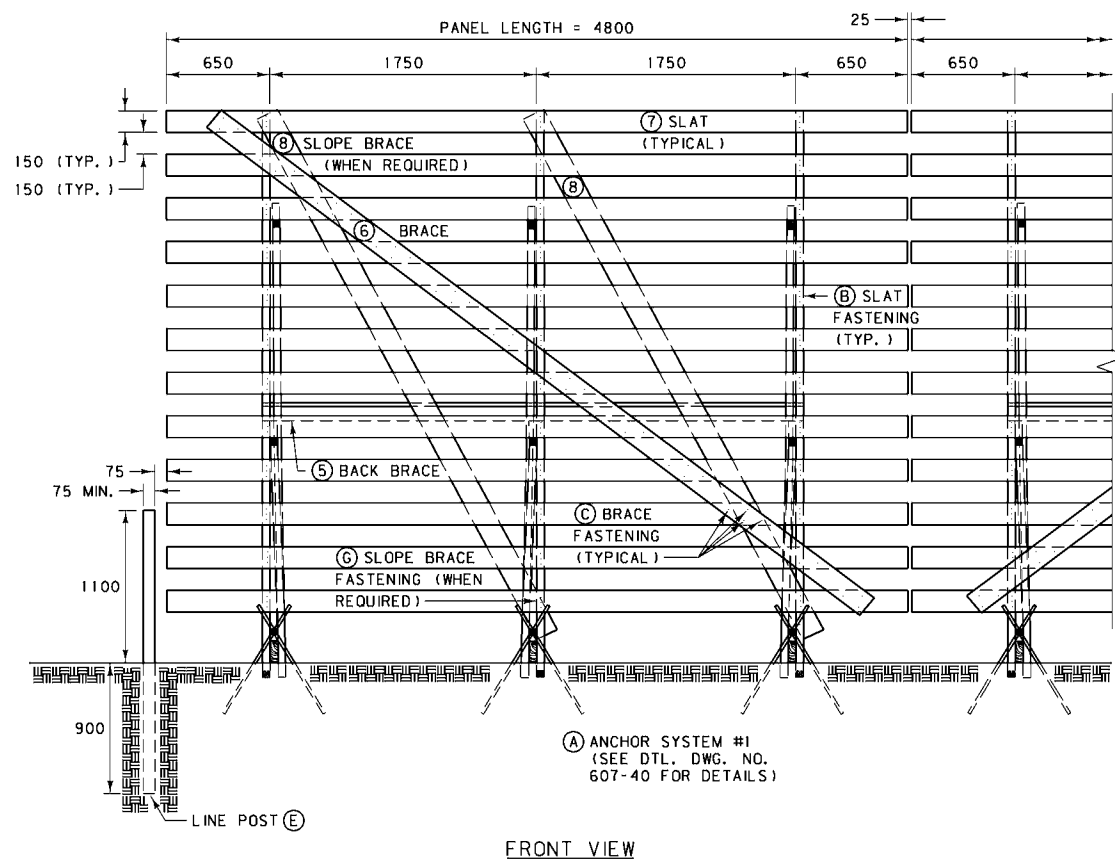
ALL CONCRETE IS CLASS "F" OR BETTER.

WHEN FENCE IS LESS THAN 15 m FROM THE EDGE OF A DRIVING LANE, USE A 9.5 mm DIA. GALVANIZED STEEL CABLE IN PLACE OF THE TOP METAL BRACE RAIL.

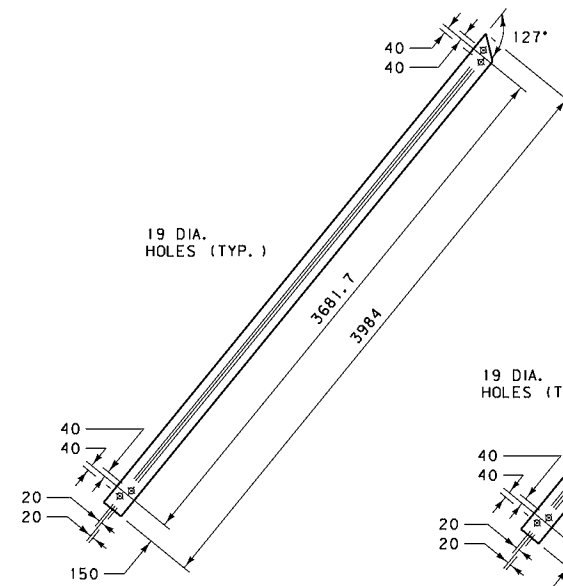
HEIGHT OF FABRIC	WIRE FABRIC ABOVE GROUND	DEPTH OF CONCRETE	DEPTH OF POST IN CONC. (MIN.)
1830	25 TO 50	900	800
1525	25 TO 50	900	800
1220	25 TO 50	750	650
915	25 TO 50	750	650

ALL DIMENSIONS ARE MILLIMETERS (mm) UNLESS OTHERWISE NOTED.

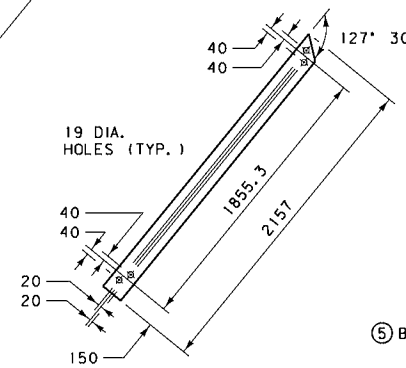
DETAILED DRAWING	
REFERENCE	DWG. NO.
SECTION 607	607-25
CHAIN LINK FENCE	
EFFECTIVE: AUGUST 1999	



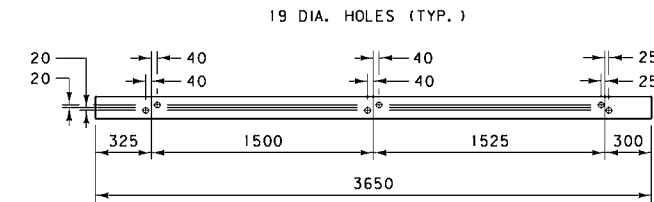
FRONT VIEW



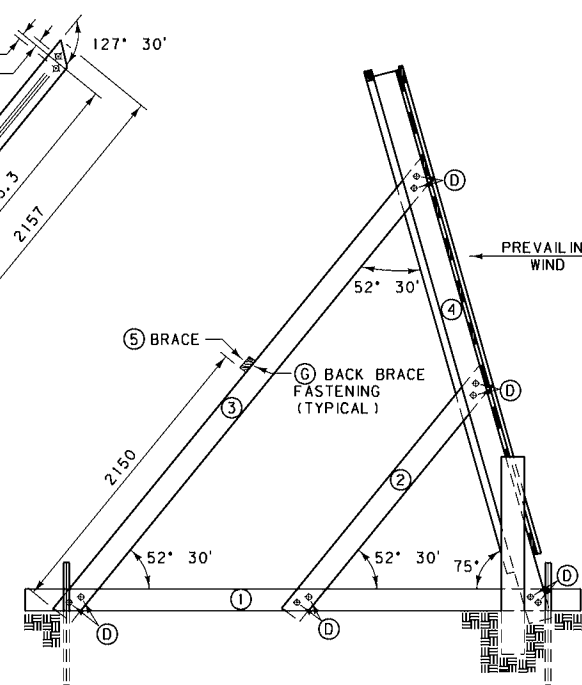
③ FRAME



② FRAME



① SILL



④ FRAME

NOTE: PLACEMENT OF REBAR ANCHORS TIGHT AGAINST SNOW FENCE MEMBERS ① ③ & ④ IS CRITICAL TO PREVENT OVERTURNING AND SLIDING. SEE ANCHOR SYSTEM #1 DETAILS, DTL. DWG. NO. 607-40.

DIG OUT AS REQUIRED FOR ENDS OF MEMBERS ② ③ & ④ AND THE ENTIRE LENGTH OF SILL ① TO ASSURE FULL BEARING OF SILL AGAINST TERRAIN.

END VIEW

GENERAL NOTES

- (A) ANCHOR SYSTEM DETAIL
USE ANCHOR SYSTEM #1 UNLESS SOIL AND MOISTURE CONDITIONS NECESSITATE THE USE OF AN ALTERNATE SYSTEM, OR AS DIRECTED BY THE ENGINEER. CONSULT DETAILED DRAWING NUMBERS 607-40 AND 607-45 FOR ANCHOR SYSTEMS #3 (ROCKY CONDITIONS) AND #2 (SWAMPY CONDITIONS).
- (B) SLAT FASTENING
FASTEN SLATS TO THE FRAME WITH 3 ~ 12d COMMON BARBED SHANK NAILS AT EACH LOCATION.
- (C) BRACE FASTENING
FASTEN BRACES TO THE FRAME WITH 4 ~ 8d COMMON NAILS AT EACH LOCATION AND CLINCH.
- (D) FRAME TO SILL AND FRAME TO FRAME FASTENING
FASTEN THE SILL AND FRAME MEMBERS TO THE FRAME AT EACH LOCATION WITH 2 ~ M16 x 127 mm STANDARD MACHINE BOLTS, EACH WITH HEX NUT AND TWO FLAT WASHERS. SEE NOTE (X) AT RIGHT.
- (E) LINE POSTS
PLACE LINE POSTS AT EACH END OF EACH LINE OF SNOW FENCE AS SHOWN. POSTS ARE 2000 mm LONG WITH A MINIMUM DIAMETER OF 75 mm AND A MAXIMUM DIAMETER OF 150 mm. BUTT TREAT 900 mm MINIMUM.
- (F) WIRE TIE
USE 12 GAGE OR HEAVIER GALVANIZED WIRE TO FORM THE WIRE TIES.
- (G) BACK & SLOPE BRACE FASTENING
FASTEN BACK BRACES TO THE FRAME WITH 2 ~ 16d NAILS, AND FASTEN THE SLOPE BRACES WITH 3 ~ 16d BARBED SHANK NAILS AT EACH LOCATION.

LUMBER - 3.6 m SNOW FENCE W/ ANCHOR SYSTEM #1			
BILL OF MATERIALS FOR ONE PANEL			
ITEM NO.	NO. OF PIECES	LUMBER SIZE	DESCRIPTION
①*	3	50 x 150 x 3650	SILL
②*	3	50 x 150 x 2157	FRAME
③*	3	50 x 150 x 3984	FRAME
④*	3	50 x 150 x 3950	FRAME
* NOTE: PRESSURE TREAT ALL 50 x 150 MEMBERS (ENTIRE FRAME)			
⑤	1	50 x 100 x 3650	BACK BRACE
⑥	1	25 x 150 x 5400	BRACE
⑦	12	25 x 150 x 4800	SLAT
⑧**	2	50 x 150 x 4000	SLOPE BRACE
** NOTE: USE ONLY WHEN SLOPE IS 5:1 OR GREATER			

HARDWARE - 3.6 m SNOW FENCE W/ ANCHOR SYSTEM #1		
BILL OF MATERIALS FOR ONE PANEL		
QUANTITY	DESCRIPTION	
①	30 M16 x 127 HEX BOLT (THREADED FULL LENGTH) AND NUT	
②	60 FLAT WASHER FOR M16 BOLT	
③	0.23 kg 8d COMMON NAILS	
④	0.76 kg 12d COMMON BARBED SHANK NAILS	
⑤	0.23 kg 16d COMMON BARBED SHANK NAILS	
⑥	12 #19 REBAR x 1500	
⑦	6 PIECES 12 GAGE TIE WIRE x 1500 ±	

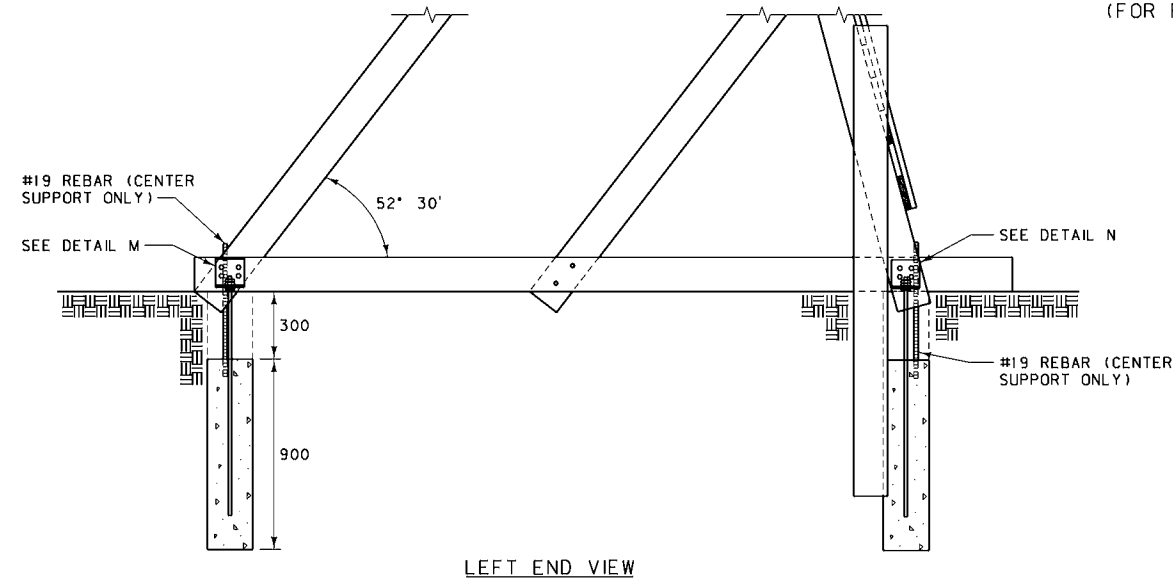
ALL NAILS MAY BE EITHER HAND DRIVEN OR DRIVEN WITH A PNEUMATIC NAILER.

(X) NOTE: AFTER M16 BOLTS HAVE BEEN TIGHTENED, BURR THE THREAD DIRECTLY BEHIND THE NUT TO PREVENT EVENTUAL LOOSENING OF THE NUTS.

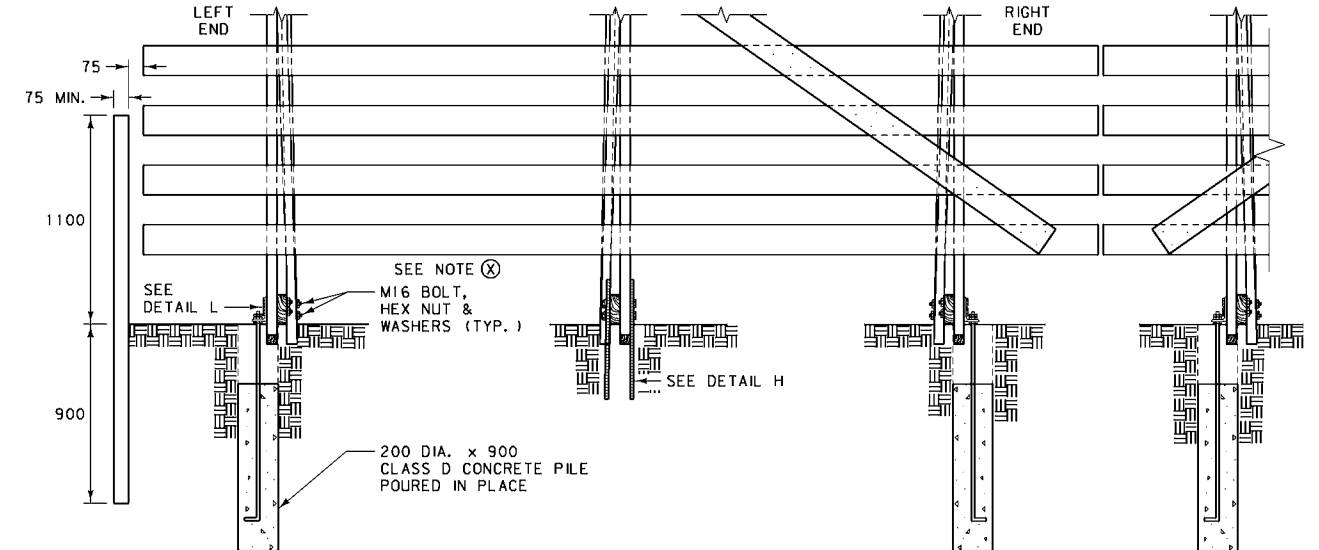
ALL DIMENSIONS ARE MILLIMETERS (mm) UNLESS OTHERWISE NOTED.

DETAILED DRAWING	
REFERENCE	DWG. NO.
SECTION 607	607-35
3.6 m WOOD SNOW FENCE W/ ANCHOR SYSTEM #1	
EFFECTIVE: AUGUST 1999	

ANCHOR SYSTEM #3 (FOR ROCKY CONDITIONS)

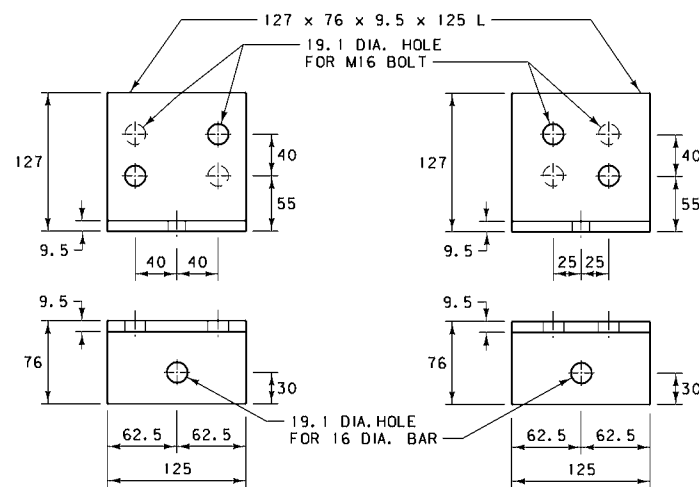


LEFT END VIEW



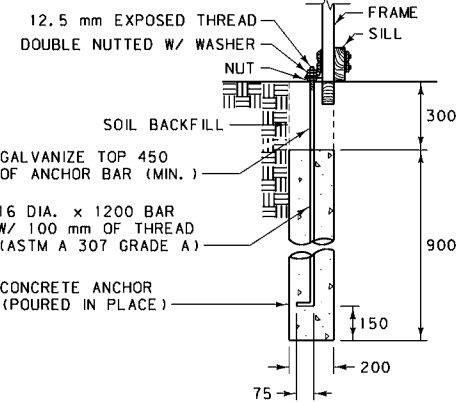
FRONT VIEW

NOTE:
HOLES SHOWN IN DETAILS BELOW ARE FOR LEFT END OF FENCE.
HOLES SHOWN HIDDEN ARE FOR RIGHT END OF FENCE.

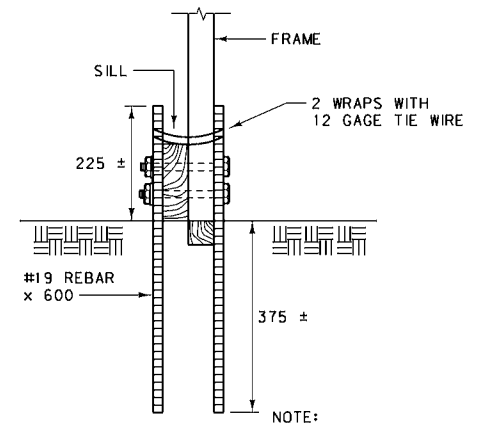


DETAIL M

DETAIL N



DETAIL L



DETAIL H

LUMBER - SNOW FENCE W/ ANCHOR SYSTEM #3

BILL OF MATERIALS FOR ONE PANEL

SAME AS FOR SNOW FENCE W/ ANCHOR SYSTEM #1

HARDWARE - SNOW FENCE W/ ANCHOR SYSTEM #3

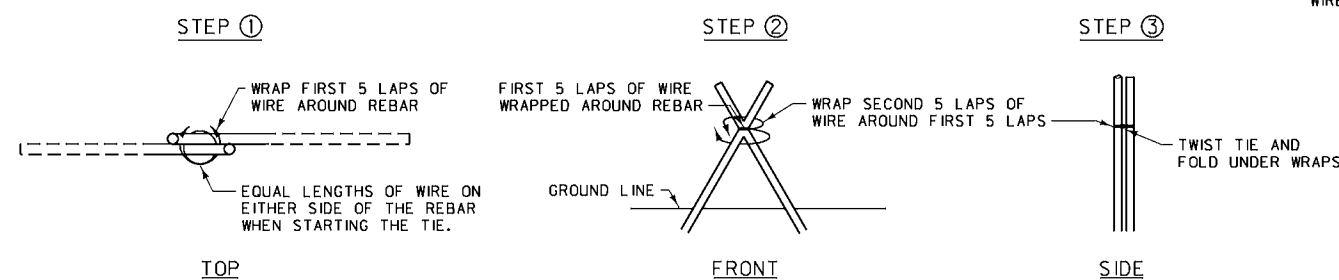
BILL OF MATERIALS FOR ONE PANEL

QUANTITY	DESCRIPTION
4	127 x 76 x 9.5 x 127.0 L
4	16 DIA. x 1200 BAR W/ 3 HEX NUTS
4	FLAT WASHERS FOR 16 DIA. BAR
0.113 m ³	CLASS D CONCRETE
4	#19 REBAR x 600
4 PIECES	12 GAGE TIE WIRE x 600 ±
30	M16 x 127 HEX BOLT (THREADED FULL LENGTH) AND NUT
60	FLAT WASHERS FOR M16 BOLT

NOTE: NAILS REQUIRED ARE SAME AS SHOWN ON HARDWARE SUMMARY FOR SNOW FENCE W/ ANCHOR SYSTEM #1

⊗ NOTE:
AFTER M16 BOLTS HAVE BEEN TIGHTENED,
BURR THE THREAD DIRECTLY BEHIND THE NUT
TO PREVENT EVENTUAL LOOSENING OF THE NUTS.

ANCHOR SYSTEM #1 (STANDARD)

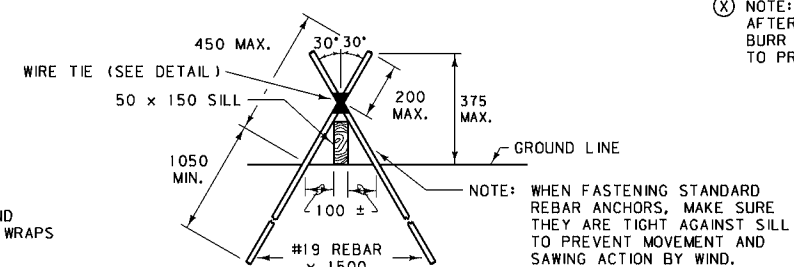


TOP

FRONT

SIDE

WIRE TIE DETAIL
USE 12 GAGE OR HEAVIER GALVANIZED
WIRE TO FORM THE WIRE TIES.



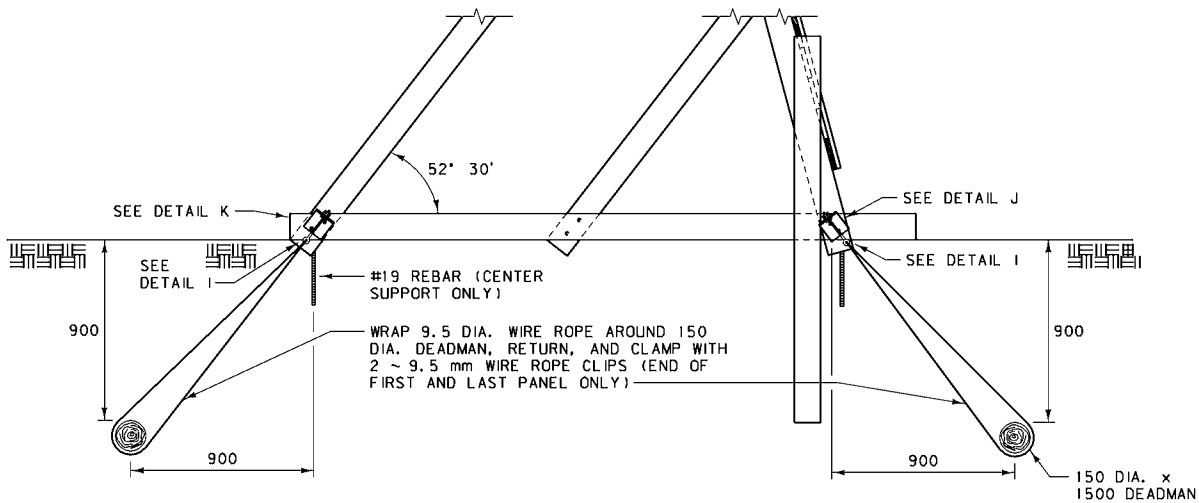
USE TWO #19 REINFORCING BARS FOR EACH END OF EACH
SILL MEMBER. DRIVE THE BARS UP TIGHT TO THE FRAME
TO PREVENT SLIDING. TIE THE REINFORCING BARS AS SHOWN
IN THE WIRE TIE DETAIL. THE PLACEMENT OF THE ANCHORS
IS CRITICAL IN PREVENTING OVERTURNING AND SLIDING OF
THE FENCE.

STANDARD ANCHOR DETAIL

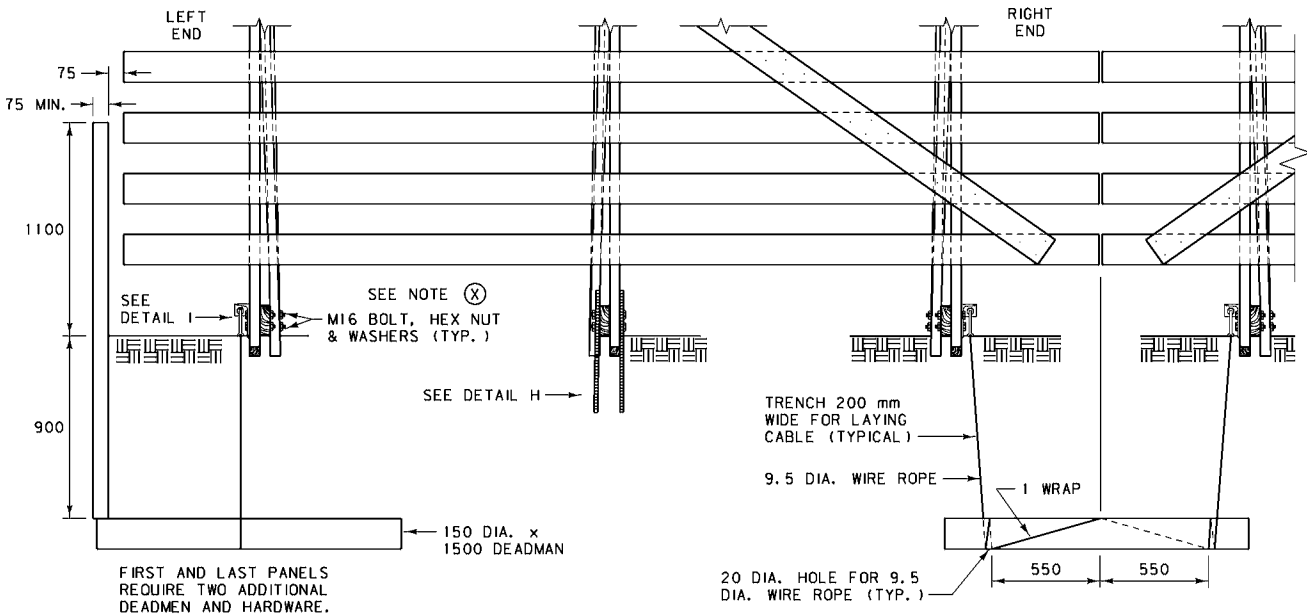
ALL DIMENSIONS ARE MILLIMETERS
(mm) UNLESS OTHERWISE NOTED.

DETAILED DRAWING	
REFERENCE	DWG. NO.
STANDARD SPEC.	607-40
SECTION 607	
WOOD SNOW FENCE ANCHOR SYSTEM #3 AND #1 DETAILS	
EFFECTIVE: AUGUST 1999	

ANCHOR SYSTEM #2
(FOR SWAMPY CONDITIONS)

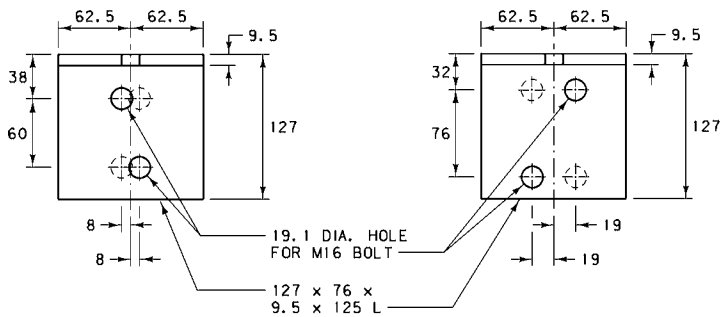
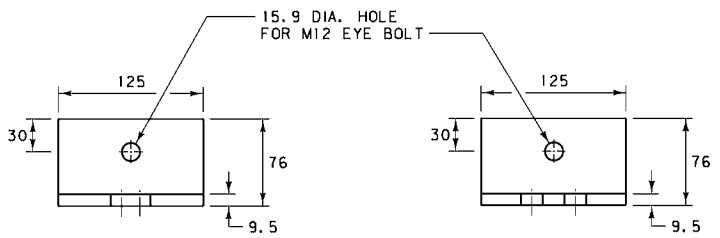


LEFT END VIEW



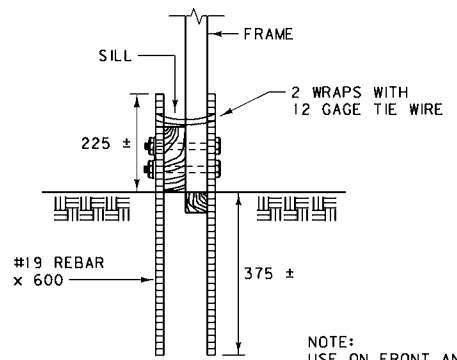
FRONT VIEW

NOTE:
HOLES SHOWN IN DETAILS BELOW ARE FOR LEFT END OF FENCE.
HOLES SHOWN HIDDEN ARE FOR RIGHT END OF FENCE.

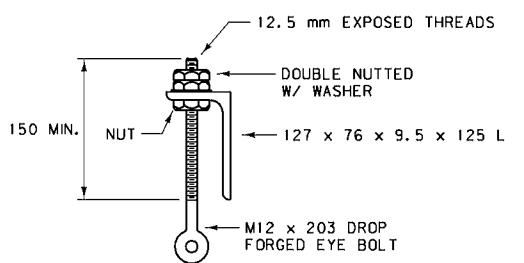


DETAIL J

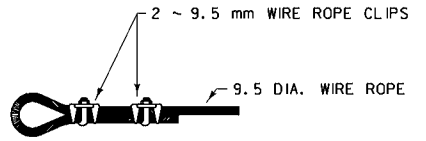
DETAIL K



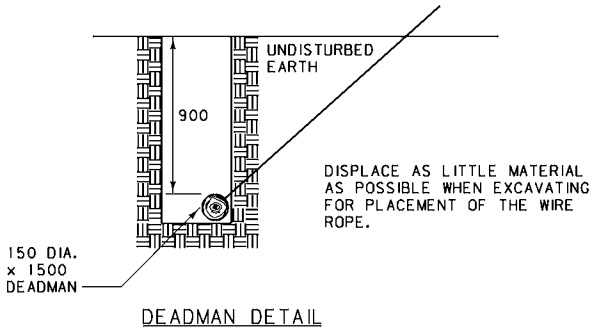
DETAIL H



DETAIL I



WIRE ROPE CONNECTION





DEADMAN DETAIL

LUMBER - SNOW FENCE W/ ANCHOR SYSTEM #2	
BILL OF MATERIALS FOR ONE PANEL	
SAME AS FOR SNOW FENCE W/ ANCHOR SYSTEM #1	

HARDWARE - SNOW FENCE W/ ANCHOR SYSTEM #2	
BILL OF MATERIALS FOR ONE PANEL	
QUANTITY	DESCRIPTION
4	127 x 76 x 9.5 x 127.0 L
8	9.5 mm WIRE CLAMPS
4	M12 DROP FORGED EYEBOLTS W/ 3 HEX NUTS
4	FLAT WASHERS FOR M12 EYEBOLTS
4	#19 REBAR x 600
4 PIECES	12 GAGE TIE WIRE x 600 ±
8500 mm	9.5 DIA. WIRE ROPE
2	150 DIA. x 1500 POST DEADMEN
30	M16 x 127 HEX BOLT (THREADED FULL LENGTH) AND NUT
60	FLAT WASHERS FOR M16 BOLT
NOTE: NAILS REQUIRED ARE SAME AS SHOWN ON HARDWARE SUMMARY FOR SNOW FENCE W/ ANCHOR SYSTEM #1	

⊗ NOTE:
AFTER M16 BOLTS HAVE BEEN
TIGHTENED, BURR THE THREAD
DIRECTLY BEHIND THE NUT TO
PREVENT EVENTUAL LOOSENING
OF THE NUTS.

ALL DIMENSIONS ARE MILLIMETERS
(mm) UNLESS OTHERWISE NOTED.

DETAILED DRAWING	
REFERENCE	DWG. NO.
STANDARD SPEC.	607-45
SECTION 607	
WOOD SNOW FENCE ANCHOR SYSTEM #2 DETAILS	
EFFECTIVE: AUGUST 1999	
 MONTANA DEPARTMENT OF TRANSPORTATION	 MONTANA CADD